

## REMARKS

### **I. Amendments**

The applicant has amended claims 31, 39, and 49 in response to the examiner's rejections under 35 USC 112, second paragraph.

The applicant has amended claims 30, 31, 33-39, 41-50, and 52-60 to correct dependency, antecedent basis, and to distinguish between structure and method limitations.

The applicant has canceled claims 32, 40, and 51.

No new matter has been added.

### **II. Claim Status**

Claims 30 and 39 are the independent claims.

Claims 30, 32-39, 41-50, and 52-60 are examined and rejected.

### **III. Response to Final Office Action Mailed June 3, 2003 and Further to the Advisory Action Mailed October 7, 2003**

#### **A. The Examiner's Rejections of Claims 31, 32, 39, 40, 49, and 51 Under 35 USC 112, Second Paragraph**

The examiner has rejected claims 31, 32, 39, 40, 49, and 51 under 35 USC 112, second paragraph. In response, the applicant submits herewith an amendment presenting rejected claims in better form for consideration on appeal, pursuant to 37 CFR 1.116(b).

#### **B. The Examiner has not Presented Sufficient Motivation to Combine Kaule with Majumdar to Overcome the Examiner's Admission that Kaule does not Disclose "the use of polyethelyne dioxthiophene polystyrene sulfonyl in its security element"**

The examiner has rejected claims 30-61 under 35 U.S.C. 103(a) as being unpatentable over Kaule in view of Majumdar, stating that:

Kaule discloses the claimed invention except for the use of polyethylene dioxthiophene polystyrene sulfonyl in its security element. Majumdar teaches that it is well known in the art to use a polyethylene dioxthiophene polystyrene sulfonyl in a security document. It would have been obvious to one having ordinary skill in the art at the time the invention was made to provide Kaule with a polyethylene dioxthiophene polystyrene sulfonyl in its security element in the manner as taught by Majumdar in order to provide the assembly with another deterrent to fraudulent tampering.

In regard to claims 33, 36 and 37, it would have been obvious to one having ordinary skill in the art at the time the invention was made to use the claimed combinations of materials, since it has been held to be within the general skill level of a worker in the art to select a known material on the basis of its suitability for the intended use as a matter of obvious design choice. *In re Leshin*, 125 USPQ 416.

In regard to claims 42-48, it would have been obvious to one having ordinary skill in the art at the time the invention was made to arrange the support/foil layers in any desired arrangement, since it has been held that rearranging parts of an invention involves only routine skill in the art. *In re Japikse*, 86 USPQ 70. Office action mailed June 3, 2003 page 3 line 18 through page 4 line 11.

In response, the applicant asserts that there is insufficient motivation to combine Kaule with Majumdar to overcome the examiner's admission that Kaule does not disclose the use of polyethylene dioxthiophene polystyrene sulfonyl (hereinafter "PEDT/PSS") in its security element.

Kaule discloses a security document equipped with a security element in the form of a thread or strip that is electrically conductive. The security element is coated with a second layer that maintains its electrical conductivity when bent or stretched. Kaule Abstract.

Majumdar discloses an imaging element which includes an electrically-conductive layer

containing a conducting polymer [for example PEDT/PSS] which can reduce electrostatic charge and prevent unfavorable physical characteristics from affecting the film. Majumdar Abstract, column 1 lines 15-18, column 2 lines 3-8, and column 12 line 34.

At page 3 lines 18-19 of the office action mailed June 3, 2003, the examiner admitted that Kaule does not disclose the use of PEDT/PSS in its security element, stating that:

Kaule discloses the claimed invention except for the use of polyethylene dioxthiophene polystyrene sulfonyl in its security element.

The examiner's rationale for modifying Kaule's security document containing an electrically conductive strip to include PEDT/PSS relies upon Majumdar suggesting using PEDT/PSS in a security document, stating in the office action mailed June 3, 2003 page 3 lines 19-20 that:

Majumdar teaches that it is well known in the art to use a polyethylene dioxthiophene polystyrene sulfonyl in a security document.

This conclusion is unfounded. Majumdar does not teach anything pertaining to security documents or security elements. Majumdar is directed to dissipating static electricity to avoid electric charge induced aberrations in images in film or paper. Majumdar teaches that PEDT/PSS is an appropriate electrically-conducting polymer that can be used to control static charge in imaging elements. See for example, Majumdar column 12 lines 36-39 and column 12 lines 58-63, which state that:

It is clear that the incorporation of increasing amount of polythiophene [defined at column 12 lines 34-35 as PEDT/PSS] in the mixture increases the (001) spacing of Laponite RDS indicating intercalation of the polymer in the clay gallery. [Majumdar column 12 lines 36-39.]

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The X-ray diffraction data clearly indicate that electrically conducting polymers such as polypyrrole and polythiophene [defined at column 12 lines 34-35 as PEDT/PSS] (component B) do indeed intercalate inside a layered siliceous material such as smectite clay (component A). Therefore, these materials are suitable for use in the present invention. [Majumdar column 12 lines 58-63.]

In fact, Majumdar does not mention security elements, and therefore does not provide any teaching motivating any modification of Kaule.

The examiner has admitted that Kaule discloses the claimed invention except for the use of PEDT/PSS in its security element. The applicant has shown that there is no motivation to combine Kaule and Majumdar. Since independent claims 30 and 39 define using PEDT/PSS in the security element, and all pending dependent claims 31, 33-39, 41-50, and 52-60 depend therefrom, the rejections of claims 30, 31, 33-39, 41-50, and 52-60 under 35 U.S.C. 103(a) as being unpatentable over Kaule in view of Majumdar are improper and should be reversed.

Respectfully Submitted,

2/16/06  
Date

[Signature]  
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